



STORM EVENTS

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Promoting Responsible Storm Water Management Practices throughout the Idaho Transportation Department

Effective Stormwater Management Requires an Effective Combination of Erosion and Sediment Control BMPs

A common misconception amongst contractors and owners is that effective stormwater management requires just one BMP on site. For example, some contractors believe that lining the perimeter of a site with silt fence is all that's needed for erosion and sediment control. This is incorrect.

Per the Construction General Permit paragraph 3.13.E.1: **"A combination of sediment and erosion control measures are required to achieve maximum pollutant removal."** The following images provide examples of effective combinations of erosion and sediment control measures.

- Rock lined channel for velocity and erosion control
- Rock check dams for velocity and sediment control
- Erosion control blankets on side slopes



- Diversion channel to control/limit run-on to exposed slopes
- Rock lined diversion channel for velocity and erosion control
- Fiber wattles on exposed slope for velocity and erosion control
- Plastic sheeting on slopes for erosion control

EPA and DOJ reach \$4.3 Million settlement with Four of the Nation's Largest Home Builders for Storm Water Violations

(Seattle, Wash. – June 11, 2008) The U.S. Environmental Protection Agency (EPA) and the Department of Justice (DOJ) reached a \$4.3 million settlement with four of the nation's largest home building companies – Centex Homes, Pulte Homes, KB Homes, and Richmond American Homes. The four settlements resolve alleged violations of requirements for the control of storm water runoff at construction sites in 34 states and the District of Columbia. Each company will pay the following penalties:

- Centex Homes: \$1,485,000
- KB Home: \$1,185,000
- Pulte Homes: \$877,000
- Richmond American Homes: \$795,000

Here in EPA Region 10, Centex Homes, based in Dallas reached settlement with EPA and DOJ for alleged Clean Water Act violations at their construction sites, including sites in Oregon and Washington. Centex Homes currently has 14 active sites in Oregon and 13 sites in Washington.

The Clean Water Act requires that construction sites have controls in place to prevent pollution from being discharged with storm water into nearby waterways. These controls include simple pollution prevention techniques such as silt fences, phased site grading, and sediment basins to prevent common construction contaminants from entering the nation's waterways.

Test Your Storm Water Management I.Q.:

1. True or False: State Water Quality Standards dictate that any discharge to a water body cannot exceed 50 NTUs of background NTU concentrations within the water body.
2. True or False: Resident Engineer stormwater management training associated with the Consent Decree is required every two years.
3. The project SWPPP must be prepared prior to the submission of the _____?
4. What agency maintains primacy for the State of Idaho's NPDES program and why?

BMP of the Quarter



BMP-4.3 Channel Protection—Flexible Liners (Permanent)

Refer to: ITD Standard Specifications Sections 212 and 624, ITD Standard Drawings P-1-D, P-2-A, and P-2-C

Description. Flexible channel protection uses a flexible material as a lining to stabilize and prevent erosion in open drainage channels.

Applications. Flexible liners may be applied as a continuous sheet covering an open channel or may be used in conjunction with rock check dams installed in a trench perpendicular to the direction of flow. The most commonly used liners are:

- **Riprap** is large angular stones placed along the stream bank or shore where water is turbulent and fast flowing and/or where soil may erode under design conditions. Riprap forms a dense, flexible, self-healing cover that adapts well to uneven surfaces.
- **Riprap and gabions** are usually placed over a filter blanket (a gravel layer of erosion control geotextile).
- **Revet mattresses** are rock-filled wire cages that are used to protect a channel bank or bed.
- **Matting** is useful as a protective measure when seeding for permanent, grassed waterways. Turf reinforcement and jute are two common types of matting used for channel protection.

Limitations. Turf Reinforcement Mats **should not** be used where their presence or appearance is aesthetically unacceptable. Effectiveness of matting may be reduced if not properly selected, designed, or installed. Matting is for use on minor channels with low flow velocities, or for intermittent channels or drainages that do not normally contain water other than during snowmelt or stormwater runoff. The drain way should have a configuration that is amenable to this type of control. The optimum configuration is a low gradient, shallow, U-shaped swale without physical instability. Matting is **not suitable** for channels with steep sides or erodible, uncompacted soil. Riprap or rivet mattresses should be used for these situations. Riprap and rivet mattress are of limited suitability if the channel is to be revegetated. 1H:1V or flatter channel side slopes are required for riprap lining. Typical channel side slopes for rivet mattresses are 1½ H:1V or flatter.

ITD STORM WATER FREQUENTLY ASKED QUESTIONS (FAQS)

Q1: The NPDES program requires any project disturbing one or more acres of soil to obtain coverage under the CGP. If I have a 3 mile long road construction project, can I break up my project into .8 acres of disturbed soil and avoid having to meet the requirements of the CGP?

A1: No. The CGP has very specific language that prohibits contractors or owners from breaking up projects into smaller segments to avoid having to meet permit requirements. Specifically, projects that either involve combinations of smaller projects or are part of one large project are referred to as being part of a “common plan of development”. For example, if a contractor is working on a small project (disturbing less than one acre of soil) but it part of a larger commercial development, the contractor of the small project would still be required to meet the requirements of the CGP because they are part of a larger common plan of development. For a detailed explanation of the concept of common plan of development, see Appendix A of the CGP and read the definition for “Small Construction Activity”.

Q2: What happens if for some reason, the Contractor is not performing or the Contractor cannot complete the contract and a new operator is brought in before the project is completed?

A2: If operational control changes, the old operator

A2 (CONT'D): submits a Notice of Termination (NOT) and the new operator submits a Notice of Intent (NOI) before taking over operational control. In many instances, operational control changes, but only for a portion of the site. In these instances, the new operator must:

1. submit an NOI; and
2. develop and implement their own SWPPP or adopt the SWPPP of the previous operator if it's still applicable (with appropriate revisions)

Quiz Answers:

1. True (per IDAPA 58.01.02).
2. True (per Consent Decree Paragraph II.A.3).
3. Notice of Intent (per CGP Paragraph 3.1.A).

The EPA Region 10 maintains primacy for the State's NPDES program which explains why EPA inspectors are the ones conducting site inspections. The reason EPA Region 10 maintains primacy is that the State Legislature has chosen not to fund a state run NPDES program. Without a state run program, control goes back to the federal government.